Electronic Version
Stylesheet Version v1.1.1

Claims

[c1] An electrostatic dissipative alignment plate, comprising: a base adapted to provide an interface between an integrated circuit and a plurality of electrical conductors; and a frame positioned on the base and adapted to receive the integrated circuit, wherein the base comprises an insulating material and the frame comprises a conducting material.

[c2] The electrostatic dissipative alignment plate of claim 1, wherein the base has a plurality of apertures, wherein each one of the apertures is adapted to align the integrated circuit and to receive one of the plurality of electrical conductors.

[c3] The electrostatic dissipative alignment plate of claim 1, wherein the plurality of electrical conductors are coupled to an electrical system.

[c4] The electrostatic dissipative alignment plate of claim 1, wherein the integrated circuit comprises a plurality of device leads, wherein each one of the plurality of device leads is in contact with at least one of the plurality of electrical conductors.

[c5] The electrostatic dissipative alignment plate of claim 1, further comprising at least one pin adapted to align the frame to the base.

[c6] The electrostatic dissipative alignment plate of claim 1, further comprising at least one fastener adapted to attach the frame to the base.

[c7] The electrostatic dissipative alignment plate of claim 1, wherein the conducting material has a resitivity of approximately 10^6 Ohms/sq or less and the insulating material has a resitivity of approximately 10^{12} Ohms/sq or greater.

[c8] The electrostatic dissipative alignment plate of claim 1, wherein the conducting material is selected from the group consisting of: graphite, carbon filled thermoplastics, Polyetherimide, Polycarbonate, and Acetal Copolymer, and wherein the insulating material is selected from the group consisting of: unfilled thermoplastics, glass-filled thermoplastics, Polyamide-imide, Polyimide, Polyetheretherketone, Polyetherimide, and Polyphenylenesulfide.

[c9] An electrostatic dissipative socket, comprising:
a housing adapted to contain a plurality of electrical conductors;

a base positioned on the housing and adapted to provide an interface between an integrated circuit and the plurality of electrical conductors; and

a frame positioned on the base and adapted to receive the integrated circuit, wherein the base comprises an insulating material and the frame comprises a conducting material.

[c10] The electrostatic dissipative socket of claim 9, wherein the base has a plurality of apertures, wherein each one of the apertures is adapted to align the integrated circuit and to receive one of the plurality of electrical conductors.

[c11] The electrostatic dissipative socket of claim 9, wherein the plurality of electrical conductors are coupled to an electrical system.

[c12] The electrostatic dissipative socket of claim 9, wherein the integrated circuit comprises a plurality of device leads, wherein each one of the plurality of device leads is in contact with at least one of the plurality of electrical conductors.

[c13] The electrostatic dissipative socket of claim 9, further comprising at least one pin adapted to align the frame and the base to the housing.

[c14] The electrostatic dissipative socket of claim 9, further comprising at least one fastener adapted to attach the frame and the base to the housing.

[c15] The electrostatic dissipative socket of claim 9, wherein the conducting material has a resitivity of approximately 10^6 Ohms/sq or less and the insulating material has a resitivity of approximately 10^{12} Ohms/sq or greater.

[c16] The electrostatic dissipative socket of claim 9, wherein the conducting material is selected from the group consisting of: graphite, carbon filled thermoplastics, Polyetherimide, Polycarbonate, and Acetal Copolymer, and wherein the insulating material is selected from the group consisting of: unfilled thermoplastics, glass-filled thermoplastics, Polyamide-imide, Polyimide, Polyetheretherketone, Polyetherimide, and Polyphenylenesulfide.

[c17] An electrostatic dissipative socket assembly, comprising:
a printed circuit board;
a base positioned on the printed circuit board and adapted to provide an interface between an integrated circuit and a plurality of electrical conductors; and
a frame positioned on the base and adapted to receive the integrated circuit, wherein the base comprises an in-

sulating material and the frame comprises a conducting material.

[c18] The electrostatic dissipative socket assembly of claim 17, wherein the base has a plurality of apertures, wherein each one of the apertures is adapted to align the integrated circuit and to receive one of the plurality of electrical conductors.

[c19] The electrostatic dissipative socket assembly of claim 17, wherein the conducting material has a resitivity of approximately 10^6 Ohms/sq or less and the insulating material has a resitivity of approximately 10^{12} Ohms/sq or greater.

[c20] The electrostatic dissipative socket assembly of claim 17, wherein the conducting material is selected from the group consisting of: graphite, carbon filled thermoplastics, Polyetherimide, Polycarbonate, and Acetal Copolymer, and wherein the insulating material is selected from the group consisting of: unfilled thermoplastics, glass-filled thermoplastics, Polyamide-imide, Polyimide, Polyetheretherketone, Polyetherimide, and Polyphenylenesulfide.